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### Dystocia due to foetal anasarca in an Assam Hill Goat

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#### Abstract

A full term pluriparous doe was presented with dystocia due to fetal abnormality. The fetus was found to be anasarca and successful per-vaginal delivery of the anasarca foetus was done.

**Keywords:** Dystocia, Anasarca, Pluriparous

#### Introduction

Dystocia or difficult birth occurs more frequently in cattle and sheep than goats (Hanie, 2006) [1]. Anasarca is generalised oedematous condition of body less commonly reported in small ruminants (Prabharan *et al.*, 2016) [2]. Fetal anasarca is the general dropsy of the tissue beneath the skin of foetus. Foetal anasarca has been observed mainly in calf, but occasionally in kids and foals (Craig, 2000) [3]. Foetal skin and subcutaneous tissue get accumulated with voluminous quantity of fluids which may land up in serious birth problem (Jackson, 2004) [4]. Fetal monsters arise from adverse factors affecting the fetus in the early stages of its development. The adverse factors are mostly of genetic origin but may also include physical, chemical and viral factors. A fetal monster usually has severe physical damage that affects its appearance but may not cause its death in the uterus. The various types of monsters and congenital abnormalities in farm animals reported in literature include conjoined twins, Schistosomus reflexus, perosomus elumbis, hydrocephalus, fetal anasarca, foetal ascites and chondroplastic monsters (Arthur *et al.*, 1996) [4].

#### Materials and methods

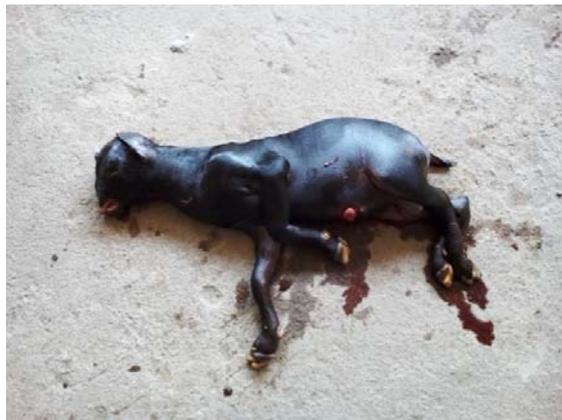
A five year old full term Assam hill pluriparous doe was presented to the Teaching veterinary Clinical Complex, College of Veterinary Science, Assam agricultural university, Ghy-22 with the history of inability to deliver the fetus even after with continuous straining for four and half hours. On clinical examination, animal was restless, vulva was swollen and an oedematous head of the foetus noticed in the birth canal. Per vaginal examination revealed presence of large sized disproportionate foetus and distended abdomen that fluctuated on pressure and wedged in the pelvic inlet. The absence of fetal reflexes indicated that the fetus was dead.

#### Treatment and Discussion

Attempts made to relieve the foetus by traction were unsuccessful due to the distended abdomen. Following epidural anaesthesia (2.5 ml, 2% Lignocaine hydrochloride) birth canal was lubricated well with liquid paraffin and the foetus was removed with gentle traction. Foetus was found to be dead with generalized edematous subcutaneous tissue (Fig. 1). Doe was treated initially with injections of Oxytocin @ 10 IU intramuscularly and Furex bolus intrauterinely. Flunixin meglumine @ 1.1 to 2.2 mg/kg IM for 3 days and Ceftiofur sodium @ 2.2 mg/kg IM for 5 days was administered.

The cause of the fetal anasarca is not definitely known but is usually circulation result of a disturbance of liquid exchange and may be of placental origin and often associated with edematous fetal membranes. Moreover the obstruction of the lymphatic may prevent the disposal of peritoneal fluid and lead to fetal ascities (Sloss and Dufty, 1986; Roberts, 2004) [6]. [7] reported that foetal anasarca may develop in a single foetus or one of the twins and associated with achondroplasia or bull dog calves and was due to simple autosomal recessive gene (Long, 1996) [8].

Large anacercous foetus was removed by force extraction and too large foetus removed by fetotomy procedures like amputation of fore limbs and evisceration or by caesarean section (Roberts, 1971)<sup>[9]</sup>. The antenatal diagnosis of most of the commonly occurring fetal complications of gestation is partly possible with ultrasonography and such pregnancies should be carefully monitored or terminated (Laiju *et al.*, 2012)<sup>[10]</sup>. Usually the pregnancy is maintained full term in case of fetal anasarca alone. In the present case, the presence of normal fetus would have helped in securing the pregnancy even though it combines with the ascities condition.



**Fig 1**

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